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Founded in 1977 by

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October 5, 2005

California Energy Commission

1516 Ninth Street

Sacramento, CA 95814

TO: CEC Commissioners

FROM: Silicon Valley Leadership Group

SUBJECT: 04 IEP 1K Committee Draft Document Hearings

Comments on the IEPR Greenhouse Gas Performance Standard

Chairman Desmond has proposed that new long-term investments in baseload generation should meet a minimum greenhouse gas (GHG) performance standard. We agree with the Chairman that such a policy is prudent to minimize the potentially significant reliability and cost risks associated with investments in highly carbon-intensive resources.

The Silicon Valley Leadership Group (SVLG) supports the concept of a GHG performance standard that is intended to encourage diversity in California's baseload fossil fuel generation without explicitly giving preference to a particular generation technology. **In setting such a standard, SVLG believes that further assessment of lifecycle impacts, weighing of benefits and costs, and examination of the cost impacts on electricity customers of different generation technologies are necessary.** Furthermore, a GHG performance standard should:

- Take into account the varying criteria air pollutants (mercury, for example) emitted by different fossil fuel generation and the treatment technologies available,
- Not discourage advancement in the development and use of Integrated Gasification Combined Cycle (IGCC) technology that cannot currently meet the standard,
- Complement and not hinder the ongoing efforts to establish competitive, transparent wholesale electricity markets,

We recommend that due consideration be given to "clean coal"¹ technologies in the IEPR report, including the adoption of action items intended to enable its development as a source of electricity to California. The draft ASTM E06.71 standard (currently under development in the Northeast) on the environmental performance of electricity generation facilities and infrastructure can be used to assess the benefits of this technology. Using that methodology, "clean coal's" environmental benefits (when replacement of older coal plants and resources conservation issues are taken into account) may be considerable. Pennsylvania is supporting similar measures and is supporting the use of the ASTM standard to assess life cycle costs. However, clean coal is only one of the options that can and should be explored.

¹ Undefined here, but potentially referring to IGCC technology coupled with carbon dioxide sequestration

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Meanwhile, further exploration into the merits and difficulties of emissions offsets is needed. Flexibility in meeting the standards should be central, but procurement of offsets must also be fungible and verifiable in a transparent manner.

SVLG commends Chairman Desmond and the CEC Commissioners for their leadership in clearly communicating the state's procurement policies to the resource development community throughout the west. Our comments are in line with our Climate Change Principles (Appendix A), particularly Sections 3(b) and (f). We agree that clearly articulating California's policies will maximize the state's "opportunity to shape near and intermediate term technology commercialization and resource development in the west."

Background

The membership of SVLG includes nearly 200 companies in the Silicon Valley, ranging from small high-technology start-up companies to global corporations. Membership organizations and supporting industries include software, systems, manufacturing, financial services, accounting, transportation, health care, defense, communications, education, and utilities. These companies provide nearly 250,000 or 25% of local jobs and account for approximately \$1 trillion in economic activity.

SVLG has continuously supported energy efficiency and demand response as cost-effective, financially viable means to bring about reliable, fairly priced power to customers. We also recognize the importance of developing GHG mitigation measures that should be designed to serve both the long-term economic well-being of California as well as the goal of climate stabilization in a cost effective manner.

SVLG is a co-founder of Sustainable Silicon Valley and supports sustainable development principles. Sustainable development has been defined by the US Business Council for Sustainable Development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."¹ The concept embraces the idea that investments in the production of energy be made wisely, so that they contribute to long term economic development without charting a course to environmental ruin.

"Clean Coal" and Competitive Markets

SVLG believes that "clean coal," paired with carbon sequestration, has the potential to meet the test of sustainable development.

For many years, the high cost of electricity has contributed significantly to the loss of jobs to other states with more affordable electricity costs. Reducing the cost of energy relative to costs in other states is important for the long-term economic sustainability of California. We believe this can be readily accomplished by adding "clean coal" to the state's current energy mix. End users will benefit from the addition of baseload technologies—directly, by having access to potentially lower cost electricity, and indirectly as fuel diversity will relieve some of the vulnerability to volatility in natural gas prices. Like investment diversity, supply diversity is a good and common sense practice.

"Clean coal" plants will also make potentially significant contributions to California's aggressive environmental goals. It is our understanding that the emissions from these plants are able to meet the GHG performance standard proposed in the draft IEPR with carbon sequestration and/or emissions offsets. For this reason, clean coal is worthy of consideration and should not be excluded from long-term investment considerations. **It should compete on its own merits with renewables, natural gas, etc. in meeting performance standards and cost-effectiveness criteria.**

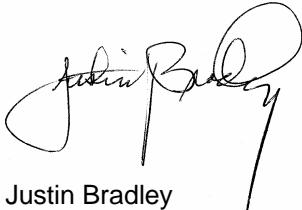
Competitive markets exist to serve customers and to provide them with choices (sometimes new and innovative choices) that best meet their needs. SVLG has been a consistent and outspoken

¹ Please refer to the USBCSD website at <http://www.usbcscd.org/>

supporter of competitive electricity markets and retail competition in particular. Like many others, we are dismayed by the slow progress in returning to retail choice, otherwise known as direct access. Expansion in fuel diversity provides an opportunity for customers to pursue retail choice through innovative financing of new generation, such as by a consortium of private investors. This approach would be a win-win for customers and planners, since it would minimize risk and cost-shifting between customer classes.

In summary, SVLG supports Chairman Desmond's proposal of a performance standard to insulate California electricity customers from the costs and risks associated with greenhouse gas and other emissions. However, before such a performance standard is established in law, we believe that further assessment of lifecycle impacts, weighing of benefits and costs, and examination of the cost impacts on electricity customers of different generation technologies are necessary.

Signed on October 5th, 2005 by:

A handwritten signature in black ink, appearing to read "Justin Bradley". The signature is fluid and cursive, with a large loop at the end.

Justin Bradley
Energy Programs Director

A handwritten signature in black ink, appearing to read "Margaret Bruce". The signature is fluid and cursive, with a large loop at the end.

Margaret Bruce
Environmental Programs Director

APPENDIX A

Climate Change Principles Silicon Valley Leadership Group Version 9 June 8, 2005

SVLG was founded on the premise that local employers should be actively involved in working with government to find innovative solutions to regional and global concerns such as climate change. Silicon Valley companies recognize that addressing climate change will require creative solutions and collaboration between companies, governments and citizens. Companies that respond to climate change see multiple benefits from their actions beyond good corporate citizenship or an opportunity to mitigate future business risk. Many see it as good for business because reducing emissions and energy consumption is a key to reducing operating expenses thereby helping to maintain their competitive edge.

The majority of SVLG member companies contribute indirectly to greenhouse gas emissions through their consumption of energy (primarily electricity and natural gas). These companies recognize that their products, fleets and employees contribute to climate change through their use of transportation. They support technologies such as teleconferencing and videoconferencing to reduce the need to travel. PFC use from semi-conductor manufacturing only accounts for a fraction of emissions. Thus, climate change policies and programs that assist SVLG companies with reducing their energy use will be the most effective. Above all, actions should be designed to serve both the long-term economic well-being of California as well as the goal of climate stabilization in a cost effective manner.

Conservation, avoiding the generation or use of energy, **energy efficiency**, getting more service per unit of energy, and low-GHG electric power **generation** are all important in positively affecting climate change.

SVLG believes the following are essential principles and actions for responding to climate change:

1) Conservation

- a) Promote energy conservation voluntarily beyond codes through incentives, and strengthening standards.
- b) Support public and corporate awareness campaigns and education programs.
- c) Encourage real-time metering and sub-panel metering to increase the information available for making energy management decisions.

2) Efficiency

- a) Continue to fund and improve successful utility incentive and rebate programs.
- b) Encourage technologies and building techniques to reduce load at both peak and non-peak periods.
- c) Support revision and enforcement of building codes and appliance standards to encourage adoption of new energy efficient technology.
- d) Support research and development that increases the efficiency of products and services.
- e) Streamline the process for incentive programs by reducing bureaucracy to encourage broader participation. Ensure that funds are timely and readily available.

3) Low-GHG Generation

- a) Support innovation that leads to marketable and cost effective products and services. Include pilot demonstrations and technology transfer.
- b) Support development of new generation, including distributed generation, building of transmission lines, and distribution facilities, by taking advantage of the cleanest forms of power first.

- c) Promote cost effective renewable energy and on-site generation, where appropriate including Combined Heat and Power, on-site solar, and wind.
- d) Encourage the reduction of institutional barriers to implement cogeneration and on-site generation solutions.
- e) Support and encourage technologies that will be most effective during peak demand.
- f) Support streamlining the approval process for Low-GHG Generation projects to encourage broader participation.